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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,279	07/18/2003	Kevan Lee Miller	YOR999124US2	4589
23405	7590	09/23/2005	EXAMINER	
HESLIN ROTHENBERG FARLEY & MESITI PC			HARPER, KEVIN C	
5 COLUMBIA CIRCLE			ART UNIT	
ALBANY, NY 12203			PAPER NUMBER	

2666

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,279

Applicant(s)

MILLER ET AL.

Examiner

Kevin C. Harper

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/15/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17-30 and 33-40 is/are rejected.
- 7) ☒ Claim(s) 15, 16, 31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

Applicant's arguments, filed July 15, 2005 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Vaman.

Terminal Disclaimer

The terminal disclaimer filed on July 15, 2005 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of US 6,907,011 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 6-10, 17-19, 22-26, 33-37 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho et al. (US 5,870,605) in view of Gai et al. (US 6,535,491) and Vaman et al. (US 6,011,780).

1. Regarding claims 1-3, 6-10, 17-19, 22-26, 33-37 and 39-40, Bracho discloses a publish/subscribe system (fig. 1). However, Bracho does not disclose reconfiguring the system. Gai discloses initiating a reconfiguration of a network (col. 11, lines 31-36; fig. 1) and reconfiguring the network (col. 12, lines 27-37; fig. 2, items 240), where some messages are not lost during reconfiguration (col. 15, lines 13-16). The reconfiguration is not disruptive (col. 15, lines 1-2) and changes a first routing path between nodes to a second routing path between the nodes (col. 7, lines 49-53). The initiation of the reconfiguration comprises forwarding a request from a

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configuration manager or node to the other nodes of the network (col. 12, lines 57-61; col. 13, lines 33-44). The reconfiguration is performed by a computer program on a computer readable medium (col. 8, lines 35-47). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to reconfigure the publish/subscribe system of Bracho while reducing message loss in order to seamlessly provide connectivity after a network failure.

2. Further, Bracho in view of Gai does not explicitly disclose that no messages are lost during reconfiguration (Gai, col. 15, lines 13-16). Vaman discloses a method of reconfiguration where no messages are lost (col. 7, lines 1-5; col. 9, line 66 through col. 10, line 1). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to not lose any messages during reconfiguration in the invention of Bracho in view of Gai in order to prevent disruptions to user communication (Vaman, col. 1, lines 30-35 and 61-66).

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho in view of Gai and Vaman as applied to claim 3 or 19 above, and further in view of Takano et al. (US 5,600,630).

3. Regarding claims 4 and 20, Bracho in view of Gai and Vaman does not disclose a changing from a first path in a first routing table to a second path in a second routing table in response to a fault. Takano discloses changing from a first path in a first routing table to a second path in a second routing table (fig. 1; col. 7, lines 37-47 and line 59 through col. 8, line 5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to change from a first path in a first routing table to a second path to a second routing table in the invention of Bracho in view of Gai and Vaman as evidenced by Takano in order to decrease the time for fault recovery (Takano, col. 2, lines 13-17).

Claim 5, 11-14, 21, 27-30 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho in view of Gai and Vaman as applied to claims 1, 8, 17, 24 or 36 above, and further in view of Moskowitz (US 5,428,606) and Shaffer et al. (US 6,236,642).

4. Regarding claim 5, 21 and 38, Bracho in view of Gai and Vaman does not disclose an ordering requirement for delivery of messages nor preserving a message order during reconfiguring of the publish/subscribe system. Moskowitz discloses a publish/subscribe system (fig. 1) having an ordering requirement (col. 3, lines 8-10 and 41-44 and 50-52). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide ordered data transmissions in the invention of Bracho in view of Gai and Vaman as evidenced by Moskowitz in order to allow for real-time data transmissions (Moskowitz, col. 1, lines 50-60).

5. Further, Bracho in view of Gai and Vaman and Moskowitz does not disclose preserving message order during system reconfiguration. Shaffer discloses preserving message order during a system reconfiguration (fig. 1, item 108; fig. 5; col. 2, lines 47-51). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to preserve message order during the system reconfiguration in the invention of Bracho in view of Gai and Vaman and Moskowitz as evidenced by Shaffer in order to avoid the reception of out-of-sequence real-time data (Moskowitz, col. 2, lines 28-34).

6. Regarding claims 11-14 and 27-30, Bracho in view of Gai and Vaman does not disclose an ordering requirement for delivery of messages nor preserving a message order during reconfiguring of the publish/subscribe system. Moskowitz discloses a publish/subscribe system (fig. 1) having an ordering requirement (col. 3, lines 8-10 and 41-44 and 50-52). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide ordered data

transmissions in the invention of Bracho in view of Gai and Vaman as evidenced by Moskowitz in order to allow for real-time data transmissions (Moskowitz, col.1, lines 50-60).

7. Further, Bracho in view of Gai and Vaman does not disclose refraining from delivering a CS-message or SC-message to a node via a new routing path until other messages are delivered to the node from an old routing path (note: a CS-message is a message received at a hub from a publishing broker and a SC-message is a message delivered from a hub to a subscriber - Bracho, col. 5, lines 25-47). Shaffer discloses preserving message order during a system reconfiguration (fig. 1, item 108; fig. 5; col. 2, lines 47-51) by queuing and delaying the reception of packets via a new routing path until packets from an old routing path are received (col. 5, lines 47-55), until a predefined time period expires. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to preserve message order during the system reconfiguration in the invention of Bracho in view of Gai and Vaman and Moskowitz as evidenced by Shaffer in order to avoid the reception of out-of-sequence real-time data.

Allowable Subject Matter

8. Claims 15-16 and 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

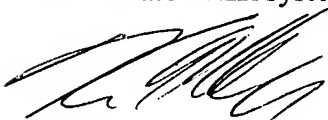
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

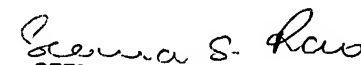
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

September 11, 2005


SEEMA S. RAO 9/21/05
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600